UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,534	04/25/2001	Thomas M. Stephany	82281SLP	7254

7590 08/12/2004	EXAMINER
Thomas H. Close	HANNETT, JAMES M

Thomas H. Close
Patent Legal Staff
Eastman Kodak Company
343 State Street
Rochester, NY 14650-2201

ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 08/12/2004   6

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _25 April 2001_.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-9_ is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1-9_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _7/30/2001_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All   b) ☐ Some * c) ☐ None of:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. _____.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _4 and 5_.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1:      Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,613,048 Chen et al.

2:      As for Claim 1, Chen et al teaches on Column 4 Lines 17-22 and on Column 5, Lines 15-38 and depicts in Figure (4 and 5) a method of image processing a digital still image, comprising the steps of: a) providing the digital still image; the digital still image is viewed as image A in Figure 4A this image composes a background image and a foreground image (20) to be moved or animated; Chen et al teaches identifying the figure in the digital still image to be animated (20).c) generating an animation model of the figure (22) d) substituting the animation model for the figure in the digital still image; e) detecting an area of missing detail in the digital still image resulting from the substitution (24) f) identifying information in the digital still image adjacent the area of missing detail; g) replicating the identified information; and h) inserting the replicated identified information into the area of missing detail to generate an animated image. Chen et al teaches that an object in an image can be identified and then moved or rotated within an image. Chen et al teaches that after the image is rotated or moved within the image, Holes (24) will be created which correspond to regions in the image that do not contain image data; See Figure 5. Chen et al teaches that in order to correct the image for the image holes, image data of

pixels that are adjacent to the hole region are interpolated and used to fill the region that does not contain information.

3:      In regards to Claim 2, Chen et al further teaches on Column 8, Lines 12-18 the step of blurring the replicated identified information.

4:      As for Claim 3, Chen et al teaches on Column 4 Lines 17-22 and on Column 5, Lines 15-38 and depicts in Figure (4 and 5) A method of image processing a digital still image to generate a plurality of animated images; Column 8, Lines 8-10. Chen et al teaches a) providing the digital still image; the digital still image is viewed as image A in Figure 4A this image composes a background image and a foreground image (20) to be moved or animated; b) identifying the figure in the digital still image to be animated (20); c) generating an animation model of the figure (22); d) substituting the animation model for the figure in the digital still image; e) detecting an area of missing detail in the digital still image resulting from the substitution (24); f) identifying information in the digital still image adjacent the area of missing detail; g) replicating (interpolating) the identified information; h) inserting the replicated identified information (interpolated) into the area of missing detail (24) to generate a first animated image; and i) defining the first animated image to be the digital still image and generating a second animated image by repeating the steps of a) through h). Chen et al teaches that an object in an image can be identified and then moved or rotated within an image. Chen et al teaches that after the image is rotated or moved within the image, Holes (24) will be created which correspond to regions in the image that do not contain image data; See Figure 5. Chen et al teaches that in order to correct the image for the image holes, image data of pixels that are adjacent to the hole region are interpolated and used to fill the region that does not contain information. Furthermore, Chen

et al teaches that several frames of data can be generated in order to facilitate motion in a
displayed scene.

5:      In regards to Claim 4, Chen et al further teaches on Column 8, Lines 12-18 the step of
blurring the replicated identified information.

6:      As for Claim 5, Chen et al teaches on Column 4 Lines 17-22 and on Column 5, Lines 15-
38 and depicts in Figure (4 and 5) a method of image processing a digital still image to generate
a plurality of animated images, (Column 8, Lines 8-10) comprising the steps of: b) providing a
digital still image I(n); the digital still image is viewed as image A in Figure 4A this image
composes a background image and a foreground image (20) to be moved or animated. c)
identifying a FIG. F(n) in the image I(n) to be animated (20); d) extracting the FIG. F(n) (20)
from the image I(n) (A); e) generating an animation model F(n+1) (22) from the FIG. F(n) (20);
f) substituting the animation model F(n+1) (22) for the FIG. F(n) (20) in the image I(n) (A); g)
detecting a difference area D(F(n);F(n+1) between the animation model F(n+1) and the FIG.
F(n); The difference area is viewed be the examiner to the hole region (24). h) identifying
information in the image I(n) (A) adjacent the difference area D(F(n);F(n+1)); This area is
viewed by the examiner as the pixels adjacent to the hole region (24). i) replicating the identified
information; This is viewed by the examiner as interpolating the data in adjacent pixels and
using the data to fill the hole region that does not contain image data. j) inserting the replicated
identified information (interpolated pixels) into the difference area (24) D(F(n);F(n+1)) to
generate an animated image I(n+1) (22); and k) repeating steps c) through j) to generate a
plurality of animated images. Chen et al teaches that an object in an image can be identified and
then moved or rotated within an image. Chen et al teaches that after the image is rotated or

moved within the image, Holes (24) will be created which correspond to regions in the image

that do not contain image data; See Figure 5. Chen et al teaches that in order to correct the image

for the image holes, image data of pixels that are adjacent to the hole region are interpolated and

used to fill the region that does not contain information. Furthermore, Chen et al teaches that

several frames of data can be generated in order to facilitate motion in a displayed scene.

Chen does note specifically state that the image processing device contains a counter that is set to

1. However, it is inherent that the image processing apparatus have a counter that can be set

equal to on/in order to keep track of the frame number in the motion video.

7:      In regards to Claim 6, Chen et al further teaches on Column 8, Lines 12-18 the step of

blurring the replicated identified information.

8:      As for Claim 7, Chen et al teaches on Column 4 Lines 17-22 and on Column 5, Lines 15-

38 and depicts in Figure (4 and 5) A method of image processing a digital still image to

generated an animated digital still image, comprising the steps of: a) providing the digital still

image; the digital still image is viewed as image A in Figure 4A this image composes a

background image and a foreground image (20) to be moved or animated; b) identifying the

figure in the digital still image to be animated (20); c) generating an animation model of the

figure (22); d) substituting the animation model for the figure in the digital still image; e)

determining a difference area in the digital still image resulting from the substitution (24); f)

identifying information in the digital still image adjacent the difference area (adjacent pixels);

g) replicating (interpolating) the identified information; and h) inserting the replicated identified

information into the difference area to generate the animated digital still image. Chen et al

teaches that an object in an image can be identified and then moved or rotated within an image.

Chen et al teaches that after the image is rotated or moved within the image, Holes (24) will be

created which correspond to regions in the image that do not contain image data; See Figure 5.

Chen et al teaches that in order to correct the image for the image holes, image data of pixels that

are adjacent to the hole region are interpolated and used to fill the region that does not contain

information. Furthermore, Chen et al teaches that several frames of data can be generated in

order to facilitate motion in a displayed scene.

9:      In regards to Claim 8, Chen et al teaches on Column 4 Lines 17-22 and on Column 5,

Lines 15-38 and depicts in Figure (4 and 5) A method of image processing a digital still image to

generated an animated digital still image, comprising the steps of: a) providing the digital still

image; the digital still image is viewed as image A in Figure 4A this image composes a

background image and a foreground image (20) to be moved or animated; b) identifying the

figure in the digital still image to be animated (20); c) generating an animation model of the

figure (22); d) substituting the animation model for the figure in the digital still image; e)

determining a difference area in the digital still image resulting from the substitution (24); f)

identifying information in the digital still image adjacent the difference area (adjacent pixels);

g) replicating (interpolating) the identified information; and h) inserting the replicated identified

information into the difference area to generate the animated digital still image. Chen et al

teaches that an object in an image can be identified and then moved or rotated within an image.

Chen et al teaches that after the image is rotated or moved within the image, Holes (24) will be

created which correspond to regions in the image that do not contain image data; See Figure 5.

Chen et al teaches that in order to correct the image for the image holes, image data of pixels that

are adjacent to the hole region are interpolated and used to fill the region that does not contain

information. Furthermore, Chen et al teaches that several frames of data can be generated in order to facilitate motion in a displayed scene.

10:     As for Claim 9, Chen et al further teaches on Column 8, Lines 12-18 the step of blurring the replicated identified information.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 5,940,538 Spiegel et al teaches an apparatus for object border tracking; USPN 5,831,685 Vlahos et al See Figure 1; USPN 6,137,919 Gonsalves et al teaches the use of forming a composite image; USPN 6,016,462 Tostevin et al teaches the use of a digital cartoon animation process; USPN 6,697,082 Takeuchi; USPN 6,268,864 Chen et al teaches the use of a method for4 linking a video and an animation; USPN 5,914,748 Parulski et al teaches a method for image background replacement.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hannett whose telephone number is 703-305-7880. The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 703-305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James M. Hannett
Examiner
Art Unit 2612

JMH
July 27, 2004

TUAN HO
PRIMARY EXAMINER